

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

March 27, 2015

Via E-mail
Karyn F. Ovelmen
Chief Financial Officer
LyondellBasell Industries N.V.
1221 McKinney Street, Suite 300
Houston, Texas 77010

Re: LyondellBasell Industries N.V.

Form 10-K for Fiscal Year Ended December 31, 2014

Filed February 17, 2015

File No. 1-34726

Dear Ms. Ovelmen:

We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 39
Results of Operations, page 40

1. We note that "exempt income" decreased the effective tax rate by 4.8%. Tell us and disclose what the nature of the exempt income is and explain whether you anticipate this exempt income will continue to positively impact your effective tax rate going forward.

<u>Critical Accounting Policies, page 63</u> <u>Inventory, page 63</u>

- 2. Please expand your disclosures regarding the lower of cost or market adjustment to inventory to include the following:
 - The per barrel benchmark price of WTI crude oil and heavy liquids used to determine the amount of the adjustment; and

Ms. Ovelmen LyondellBasell Industries N.V. March 27, 2015 Page 2

• The carrying value of the inventory that is at-risk for further adjustment as of the most recent balance sheet date.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, me, at (202) 551-3854, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Terence O'Brien for

Melissa N. Rocha Senior Assistant Chief Accountant